



EMERGENCY MEDICAL SERVICES
ADMINISTRATORS ASSOCIATION OF CALIFORNIA

The Roles and Responsibilities of
Local Emergency Medical Services Agencies
within the California
Emergency Medical Services System

A Position Paper by the Emergency Medical Services
Administrators Association of California - 1996

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Emergency Medical Administrators Association of California (EMSAAC)

This position paper was prepared by the Emergency Medical Services Administrators Association of California (EMSAAC). Its purpose is to outline the roles and responsibilities of the local emergency medical services agency (LEMSA) within the local and statewide emergency medical services (EMS) systems in California. Roles and responsibilities have been defined in a general nature, rather than specific, as each LEMSAs must tailor its operation to the specific needs of the local EMS area.

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Executive Summary

A local EMS agency (LEMSA) is a governmental agency which is designated to "...plan, implement, and evaluate the local Emergency Medical Services System (H&S 1797.204)." In California, there are currently 32 LEMSAs throughout the state, some with jurisdiction within a single county, while others provide a regional agency with multi-county jurisdiction.

The LEMSA was created to be an independent agency with the authority and resources to supervise the conflicting special interests of the various providers of service in order to enhance patient care. LEMSAs were required by state statute in the early 1980s as a result of problems which had occurred during the implementation of paramedic and emergency care services in California in the 1970s. The rapid expansion of paramedic and emergency care programs in the 1970s had caused serious problems with jurisdictional conflicts and financial interests conflicting with patient care. In addition, there was a lack of coordination between participants in the EMS System to ensure that effective emergency medical services were provided from the time of onset through definitive services at a hospital. The creation of LEMSAs provided a mechanism to plan and implement systems of emergency care and to mediate disputes between system participants.

Each LEMSA is charged with implementing statutes, regulations, and local policies that apply to that jurisdiction's emergency medical services (EMS) system. Because LEMSAs differ widely in geography, population distribution, medical resources, medical practice, local history and local expectations, each LEMSA has responded to these challenges in its unique fashion. Each LEMSA has developed its own specific mission and goals in response to these variations.

This paper identifies specific roles and responsibilities, as defined by statute, regulations, state guidelines, and, in some cases, by the LEMSAs themselves, in the accomplishment of statutory and regulatory requirements. Central to these activities is the concept and commitment to effective patient care, based on sound medical practice and consistent with the medical resources and expectations within the community. "Medical Control" is the term we use to ensure that all components within an EMS system are consistent with the primary goal of effective patient care.

The primary role of the LEMSA is the integration of system services, the provision of medical direction and appropriate medical standards, and system planning. Integration of services requires a balance of provider autonomy and multi-organizational cooperation. LEMSAs strive to integrate the services within the EMS System both horizontally, between similar types of providers, and vertically, between providers delivering emergency medical services at different phases of the patient's care. These participants include prehospital and hospital-based providers. *EMS System Standards and Guidelines* (Emergency Medical Services Authority #101 - June 1993) provide a framework for comprehensive system development by LEMSAs statewide. The Guidelines identify the eight (8) major components of an EMS system as:

- ❖ Personnel and Training
- ❖ Communications
- ❖ Transportation
- ❖ Assessment of Hospitals and Critical Care Centers
- ❖ System Organization and Management
- ❖ Data Collection and System Evaluation
- ❖ Public Information and Education
- ❖ Disaster Medical Response

The roles and responsibilities of the LEMSA are broad and multi-disciplinary in nature. These roles and responsibilities are directed toward the implementation of a system which balances the unique skills and interests of participating organizations to provide a coordinated system of emergency medical care. This paper elaborates on the position of EMSAAC regarding the implementation and realization of these components.

Purpose

The purpose of this EMSAAC Position Paper is to identify and clarify, in specific terms, the roles and responsibilities of the local emergency medical services agency (LEMSA) within the local and statewide emergency medical services (EMS) systems in California. Although the roles and responsibilities are defined in the California Health & Safety Code (Division 2.5) and in Title 22 of the California Code of Regulations (Division 9), implementation of these statutes and regulations statewide has naturally required interpretation and development of these responsibilities by local EMS systems. Such roles and responsibilities are in continuous evolution in order to modify LEMSA and system operation to meet the changes in patient and community needs, medical technology and standards of care, and available resources. Therefore, this document will require periodic review and revision.

There are many differences in LEMSAs throughout the State. These differences relate primarily to differences in geography, population distribution, medical resources, medical practice, history and local expectations. Each LEMSA has developed its own mission and goals in response to these variations. Although there are variations among LEMSAs, many of the basic responsibilities and activities are common to all LEMSAs. It is the intent of this paper to distill from the current 32 LEMSAs in California, a core set of roles and responsibilities, as determined by these agencies.

This document provides a tool for informing individuals and organizations on the roles and responsibilities of the LEMSA. This would include EMS personnel, prehospital provider agencies, hospitals and medical systems, state and regional organizations which represent system participants, elected and appointed officials, third party payers, and interested members of the community.

Background & History

Prior to the enactment of the Federal *Emergency Medical Services Systems Act* of 1973, there were few medical standards, little regulation, and no system-wide coordination applicable to response, rescue, and medical care for victims of medical emergencies. Generally, each individual provider of patient care services operated with little or no coordination with other organizations. Private companies, municipalities, public safety districts and county governments each had some involvement in emergency care. Local hospitals, including county hospitals established for the indigent, provided mechanisms for receiving and treating emergency patients. Political boundaries were generally used to define service areas, and differences among local communities, especially as they relate to the resources available within those communities, left many segments of the population without adequate care. Problems included a delayed or inadequate response due to the emergency being located on the wrong side of a political boundary.

Experience demonstrated that the provision of emergency medical services in the field, prior to arrival at a hospital, could save lives. The public's increased awareness of this helped to promote the further development of emergency medical services as a necessary component of health care delivery.

The new physician specialty of "emergency medicine" strengthened the care in hospital emergency departments and encouraged the establishment of medical standards for the provision of prehospital emergency care.

Despite these advances, it became evident in some areas that excessive competition between some ambulance transportation providers had resulted in unacceptable variance in the quality of prehospital care. The public and elected officials lacked the expertise to recognize the quality of services being provided. Hospital specialty services were not always recognized by the prehospital providers, or were not utilized because of the parochial policies that kept services within political jurisdictions.

The *systems* approach to emergency medicine establishes foremost that medical care should be provided in a manner wherein all components providing service operate in a coordinated manner, and that there be continuity between phases in the course of the care of the emergency patient.

The 1973 *Federal Emergency Medical Services Systems Act* defined an emergency medical services system as "A system which provides for the arrangement of personnel, facilities, and equipment for the effective and coordinated delivery in an appropriate geographic area of health care services under emergency conditions (occurring either as a result of the patient's condition or of natural disasters of similar situations) and which is administered by a public or nonprofit private entity which has the authority and resources to provide effective administration of the system."

The 1980 California Emergency Medical Services system and the Prehospital Emergency Medical Care Personnel Act authorized the creation of local Emergency Medical Services agencies (LEMSAs) to provide such an independent and authoritative agency to be responsible for planning, implementing, and evaluating emergency medical services systems in California.

Counties were designated the smallest political subdivision to have overall control of the EMS system within its jurisdiction. While the implementation of an EMS system was discretionary, a LEMSAs was required if a county determined that it would implement an EMS system.

Counties were designated as the responsible agencies for a variety of reasons. Most importantly, counties were already responsible for health and medical care issues and the administration of health care systems. Also, with over 1,000 incorporated cities and fire districts in California, there was a concern that many of these jurisdictions would not implement this voluntary program in a manner that would serve the public best from a medical viewpoint. Monitoring by the then newly created State EMS Authority would be hampered by the overwhelming number of potential local administering agencies. There was also a concern that the provision of EMS services would be negatively affected by provincial interests and jurisdictional disputes. By placing primary responsibility for local EMS systems with counties and their designated LEMSAs, it was hoped that jurisdictional problems could be minimized, regional systems administration could be more manageable, and statewide oversight could be optimized. Over fifty-percent (50%) of the counties have joined into multi-county/regional EMS Systems.

Existing Framework of Roles and Responsibilities

EMS System Standards and Guidelines (Emergency Medical Services Authority #101 - June 1993) primarily focuses upon the specific actions and goals to be adopted by LEMSAs in order that all California residents and visitors are provided with quality prehospital care when they need such. LEMSAs are given the task of implementing these guidelines in accordance with the availability of local resources and expectations. Division 2.5 of the California *Health and Safety Code* and Title 22 of the California *Code of Regulations* establish specific definitions and standards for LEMSAs and EMS system development and operation.

The LEMSA is defined in Section 1797.94 of the *Health and Safety Code* as “...the agency, department, or office having primary responsibility for administration of emergency medical services in a county and which is designated pursuant to Chapter 4 (commencing with Section 1797.200).” Section 1797.204 of the *Health and Safety Code* requires the LEMSA to “...plan, implement, and evaluate an emergency medical services system, in accordance with the provisions of this part, consistent of an organized pattern of readiness and response services based on public and private agreements and operational procedures.”

Core Responsibilities of the LEMSA

The LEMSA is responsible for developing and coordinating an integrated emergency medical care delivery system which is composed of educational agencies, dispatch organizations, prehospital provider agencies, and hospitals and specialty care facilities. The LEMSA is not generally a direct provider of services to patients. Rather, the LEMSA is an independent agency, usually structured as an agency of local government or a joint powers agency, which is responsible for system management and administrative and regulatory functions. These functions include system planning, training program approval, provider and hospital designation, the establishment of appropriate medical, operational, and quality standards, monitoring and facilitating compliance, and the certification, authorization, and accreditation of personnel. LEMSAs are also generally charged with contingency planning for the medical care provided in the event of an unexpected catastrophe. Perhaps the LEMSA's most important role is with the interaction of system participants — facilitating, coordinating, and mediating their interface. Additionally, local communities may charge its LEMSAs with additional responsibilities, including, but not limited to, medical quality assurance for other county agencies, implementation of prevention programs, the development and administration of local ambulance ordinances, and the coordination of research projects on prehospital/EMS topics.

The *EMS Systems Standards and Guidelines* reference defines five stages of emergency response, these being pre-response, prehospital, hospital, critical care, and rehabilitation. To achieve successful patient outcomes, care of the patient at each stage must be coordinated with services to be delivered at other stages in the response. These various services may be provided by different organizations. While it is important that each organization maintain operational autonomy to efficiently provide services, this autonomy must be balanced by the equally important need for multi-organizational cooperation in order to complete the “chain of survival” through all phases of the EMS System. The LEMSA is unique in that it does not play a role in direct patient services, yet is involved in the coordination of all aspects of the EMS system. The LEMSA is therefore positioned to coordinate system participants, facilitating the interdependent relationships which are necessary for coordinated emergency patient care services.

California's EMS Systems Act used the following model for identifying the activities and responsibilities of local EMS systems. The model uses eight major components of an EMS system. Each major component will be discussed below.

Component 1. Personnel and Training.

- ❖ It is the responsibility of the LEMSA to develop policies for the local utilization of licensed, certified, authorized or designated prehospital personnel (EMT-Is, EMT-IIs, EMT-Ps, MICNs, Base Hospital Physicians, dispatchers, etc.). This responsibility includes the development and implementation of procedures to locally credential such personnel to practice within the local emergency medical services system.
- ❖ It is the responsibility of the LEMSA to develop policies and procedures for the authorization of EMS education programs and agencies, including public safety first-aid, EMT-I, EMT-II, and paramedic training. Additionally, the LEMSA approves continuing education programs for re-credentialing of prehospital personnel.

Component 2. Communications.

- ❖ It is the responsibility of the LEMSA to participate in planning and coordination for system access through 911 and other means. This may include system protocols for dispatch triage and treatment. Where appropriate, the LEMSA should designate medical dispatch centers for the dispatch and coordination of medical resources including EMS aircraft.
- ❖ It is the responsibility of the LEMSA to develop a “culture” among members of the prehospital community that encourages open discussion, appropriate self criticism, and provides opportunity for all system participants to express their positions on specific issues.
- ❖ It is the responsibility of the LEMSA to plan for an emergency medical services telecommunications system which provides for the infrastructure and components capable of providing dispatch, on-scene coordination, medical direction, inter-hospital, and disaster communications.
- ❖ The LEMSA must oversee or monitor dispatch and coordination facilities, such as emergency medical dispatch and central EMS aircraft dispatch centers.

Component 3. Transportation.

- ❖ The LEMSA is responsible for authorization of system participants. This may include licensing/designating agencies under specific statutes or ordinance codes. Specific authorizations include:
 - ◆ Ambulance transportation agencies
 - ◆ First response agencies
 - ◆ Advanced prehospital care agencies, such as Paramedic or EMT-II
 - ◆ Enhanced level of practice for basic prehospital care providers, such as defibrillation and endotracheal intubation
 - ◆ EMS aircraft agencies

Component 4. Assessment of hospitals and critical care centers.

- ❖ The LEMSA reviews local emergency department, in-patient, and specialty care capabilities and determine appropriate triage protocols for determining patient destinations within the emergency medical services system.
- ❖ The LEMSA designates base and receiving hospitals as necessary for operation of the emergency medical services system. If appropriate, alternate base hospitals may be designated.
- ❖ The LEMSA designates, based upon available resources and identified need, specialty care facilities such as trauma centers, pediatric centers, cardiac centers, or other specific target conditions.
- ❖ The LEMSA develops and issues guidelines for the implementation of transfer agreements and for the facilitation of appropriate interfacility transfers. The LEMSA may participate in the investigation of reported transfer law violations.

Component 5. System Organization and Management.

- ❖ Develop, implement, and update Emergency Medical Services Plan for the local EMS area. This

process must allow for the involvement of EMS system organizations and the community in the planning and decision-making process.

- ❖ Retain a medical director for the provision of system medical direction leadership, including, but not limited to:
 - ♦ development of medical standards;
 - ♦ certification/accreditation of personnel;
 - ♦ implementation of a confidential system of medical audit procedures for quality assurance and quality improvement, including site visits, case review, and audit screens. These quality assurance and quality improvement activities should be directed toward an ongoing review of system activities, performance, and outcomes at all levels and will include the investigation of problem cases. System modifications should be developed and implemented to improve system performance (including LEMSA performance);
 - ♦ development and implementation of a quality improvement plan, including the review and approval of provider-based quality improvement programs; standards for remedial education of personnel; and disciplinary investigations for prehospital personnel;
 - ♦ implementation, designation and oversight of continuing education providers and EMS training organizations.
- ❖ Authorize or plan for coordinated patient care service at all levels.
- ❖ The LEMSA implements and maintains policies and procedures which define operational medical procedures and protocols. Standards include treatment protocols, medical equipment standards, do-not-resuscitate standards, standards for determinations of death, personnel policies such as credentialing, continuing education, scope of practice, and procedures defining the roles and responsibilities of participating agencies such as prehospital and hospital organizations.
- ❖ The LEMSA seeks stable funding for ongoing operations. In addition, the LEMSA should seek grant funds and other special funding sources to conduct appropriate EMS-related research, increase local resources, and implement new or modified EMS programs.
- ❖ The LEMSA has a regulatory role with regard to enforcement of local standards such as county ordinance codes, provider agreements, and local policies and procedures.
- ❖ Where system resources are limited, the LEMSAs assists local agencies in upgrading services to enhance system operation. When competition between local agencies within a single area interferes with effective system operation and promotes inefficiency and inflates system cost, the LEMSA should take action to minimize the negative impact of such competition, including, but not limited to the designation of exclusive operating areas.
- ❖ The LEMSA offers and provide technical assistance to local system participants in order to assist with the development and implementation of effective emergency care programs.
- ❖ The LEMSA facilitates the development and availability of critical incident stress debriefing (CISD) services.
- ❖ The LEMSA mediates disputes between system participants, when necessary.

- ❖ The LEMSA may participate in the management of EMS funds based upon SB12/612 and tobacco taxes.
- ❖ The LEMSA participates in state-wide EMS system planning and coordination, and the development and revision of state regulations and guidelines.
- ❖ The LEMSA coordinates activities with adjacent LEMSAs to facilitate effective patient care services in border areas. This includes collaboration with other LEMSAs in the areas of credentialing, scope of practice, continuing education, and medical control.

Component 6. Data Collection and Evaluation.

- ❖ The LEMSA integrates all levels of available operational and medical information for system monitoring and reporting, quality improvement, research, and strategic planning. This includes dispatch, prehospital, emergency department, in-patient, specialty center, and discharge data. In the future, this may include data on expanded out-of-hospital services and prevention programs. This information management system should be automated and must meet minimum state standards.
- ❖ The LEMSA inventories resources for system planning, routine operational planning and deployment, and disaster operations.
- ❖ The LEMSA participates in and plans for research for scientific analysis and system improvement.

Component 7. Public Information and Education

- ❖ The LEMSA participates in public information and education programs designed to promote wellness, injury prevention, EMS system awareness, the public's ability to provide emergency care through cardiopulmonary resuscitation and first aid, and to teach access to the emergency medical services system as well as access to non-acute medical systems.

Component 8. Disaster Medical Response

- ❖ The LEMSA develops medical disaster and multi-casualty procedures which are based upon the incident command system and Standardized Emergency Management System (SEMS) which integrate all components of the emergency medical services system. Specific disaster planning must minimally address the following:

- ♦ Medical dispatch and coordination during disasters
- ♦ Prehospital disaster medical procedures
- ♦ Integrated multi-hospital disaster coordination, including plans for the evacuation of medical facilities
- ♦ LEMSA activities during a disaster
- ♦ Integration of mutual aid and linkages with local, state, and federal agencies.

These disaster procedures include links with other community disaster plans to allow for a coordinated response with other emergency services providers. Specific linkages include:

- ♦ Local and regional OES
- ♦ Local governments

- ♦ EMS providers and hospitals
 - ♦ Public safety agencies
 - ♦ Disaster medical assistance teams
 - ♦ Sites for casualty collection points
 - ♦ Allied agencies, such as the Red Cross and amateur radio organizations
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- ❖ The LEMSA plans for the provision and/or utilization of medical mutual aid.
 - ❖ The LEMSA develops and tests procedures for the medical management of patients or rescuers contaminated by hazardous materials.
 - ❖ The LEMSA is a participant in, or takes a leadership role in disaster drills.

Medical Direction & Control

While the activities of the LEMSA may seem primarily administrative in nature, LEMSA activities are undertaken with the goal of providing effective patient care services. Every LEMSA is required to designate a licensed physician with substantial experience in emergency medicine “...to provide medical control and to assure medical accountability throughout the planning, implementation and evaluation of the EMS system.” (H&S 1797.202).

Medical direction occurs prospectively, through the establishment and implementation of clinical standards; immediately, through mechanisms for on-line medical direction; and retrospectively through quality of care review and data analysis. A major role of the Medical Director is to develop consensus among members of the EMS system and the local medical community regarding these clinical standards and expectations. This facilitates the integration of the EMS System with the overall local medical/health system. The specific roles of the LEMSA Medical Director in each of these spheres is discussed below:

Prospective Medical Direction

- ❖ Within the boundaries of state law and regulation, prospective medical direction includes the development of clinical standards and treatment protocols for prehospital personnel. This process defines the clinical expectations of prehospital personnel, as defined by the entire EMS community for its region.
- ❖ In addition to the development of treatment protocols, prospective medical direction and control involves the development of standardized policies relevant to prehospital care, such as the identification of candidates for specialized care or the utilization of air medical support.
- ❖ The Medical Director must ensure that prehospital personnel are appropriately trained, and that continuing education opportunities are clinically sound and relevant to the local standards of prehospital care. The accreditation of EMT-Ps is the primary means by which the Medical Director may assure that ALS-level personnel have received an adequate orientation and maintain appropriate performance within the local system.

Immediate Medical Direction

- ❖ It is the responsibility of the LEMSA to ensure that field personnel, especially ALS personnel, have access to physician authority and accountability as they perform their functions including, if applicable, the designation of base hospitals. This involves maintenance of a communications network (and backup systems), and procedures to ensure that all services are provided under physician control or based upon approved standard treatment protocols.
- ❖ The Medical Director retains authority to remove personnel from patient care services if the Medical Director determines that the individual poses an immediate threat to the health and safety of the public. The Medical Director implements policies that provide this protection to the public while providing due process to the individual in question. In cases involving EMT-Ps, the Medical Director refers disciplinary actions to the EMS Authority.

Retrospective Medical Direction

- ❖ The Medical Director implements a clinical quality assurance/quality improvement system that can comprehensively examine and evaluate the quality of care provided by the EMS system. The Quality Assurance/Quality Improvement System integrates the quality review activities of the LEMSA, provider agency, hospitals, and the individual care giver. This retrospective review system involves a number of key activities.
 - ◆ Data Collection
 - ◆ Data Evaluation
 - ◆ Mechanisms for testing and implementing system improvements
 - ◆ Mechanisms for remedial education, training, and certification/licensure/authorization review
 - ◆ Maintenance of a confidential medical QA/QI process
 - ◆ Maintenance of a system environment or culture that can examine its own areas for improvement.

System Planning

Essential on both a short-term and long-term basis, system planning requires mechanisms for obtaining input from patients, system participants, and the community. Mechanisms for input are available for specific episodic issues and for broad system planning recommendations. System planning is based upon a needs assessment which considers the patient population, current medical literature, technology, and barriers to the delivery of services such as distance, transportation, available resources, language and cultural barriers, and special community needs.

The primary focus of system planning is patient care services. While other issues will be considered in the planning process, system planning must be targeted to, within the available resources, continuously improving outcomes for all patients who access the EMS system, emergent or non-emergent. The emergency patient, while only a small percentage of the patient population, represents those in high risk for morbidity and mortality, and is one of the primary reasons for having an EMS system. This patient needs timely, reliable, effective and coordinated emergency care. This care should be provided through a system with easy access, adequate response, appropriate patient disposition, and adequate access to specialty care (through triage or transfer when needed). For all patients, the system goal includes getting the right patient to the right facility most appropriate to the needs of the patient. This delivery of the patient to his/her facility of choice (when patient condition permits), especially if that patient is a participant in a managed care organization. All patients expect and deserve a response that is prompt and professional.

Several guiding principles are utilized by the LEMSA in the development of the local EMS system plan. These include an emphasis on a *systems* approach to EMS operations. The systems approach recognizes the interdependent relationships of organizations providing EMS during the various stages of EMS system response and incident management; independent oversight of system performance; external and authoritative medical direction which is integrated for all system components; and objective patient-driven standards for EMS services.

Non-patient care issues are also considered during the planning process. These include the fiscal impact of the EMS system upon patients, taxpayers, and third party payers; appropriate triage and utilization of resources; the rural or urban nature of the area and the type of personnel, such as volunteer or professional staff. System planning addresses the fact that the public does not have the opportunity to shop for EMS services. Rather, Californians have come to expect a prompt and professional response when the system is accessed — regardless of jurisdictional boundaries.

The LEMSA implements services consistent with the standards established in California Statutes, as defined by the California EMS Authority and EMS Commission. These standards are developed to allow for services by participating local organizations and medical facilities. Consequently, the LEMSA implements and interprets laws and regulations established by the state which affect personnel who deliver services directly. The LEMSA also advises state and local elected officials on system operation and make recommendations for policy changes to enhance service delivery.

Effective lines of communication are essential for the LEMSA to implement an effective EMS system. Many elected officials do not generally understand the *systems* concept of EMS, but instead focus upon individual concepts, such as cost and number of available resources. Service delivery personnel and organizations frequently operate from the perspective that they are the focus of the entire EMS system, not the patients they serve. The role of LEMSA includes promotion of an understanding of the breadth and complexity of the EMS system among the elected officials and service delivery personnel/organizations.

The LEMSA sets standards within which system participants may plan and operate services. For example, the LEMSA may set staffing goals and/or performance standards, while allowing the provider agency the flexibility to establish scheduling and deployment programs to effectively and economically meet the established standards. LEMSA intervention into the implementation plans of the service provider is limited to situations where such implementation plans fail to meet the established standards of clinical care or negatively impact the delivery of services.

An important, but sometimes controversial issue for LEMSAs is the determination of who may provide services within the EMS System of the LEMSA. Generally, the authorization to provide service is granted to any organization which has demonstrated the ability to operate within the standards for that type of service. However, in some cases, it is necessary to limit the number of providers to ensure medical quality and/or where competition is negatively impacting services. Examples include the establishment of exclusive operating areas for paramedic and/or ambulance services, and the designation of specialty care centers and base hospitals. These decisions need to be implemented through a fair, open and objective process.

Summary

The roles and responsibilities of the LEMSA are broad, and are defined by regulation, statute, and local policy. The LEMSA must be responsive to local needs as it considers national, state, and regional standards of clinical care. To be successful, LEMSA staff and medical directors need to interact with local, state, and federal government agencies; understand health care planning, operations, and reimbursement; understand medical literature related to emergency care; negotiate working relationships involving public and private agencies; and understand legal issues related to health care. Appropriate implementation of such a complex system of medical care requires effective communications techniques, the ability to mediate conflicts, innovative concepts in system operation, the flexibility to revamp or retire current methods (even those which may have been successful in the past), and local system participants who are willing to work cooperatively in the provision of emergency care.

List of Terms

The following list of terms is from the *EMS System Standards and Guidelines* (Emergency Medical Services Authority #101 - June 1993):

advanced life support (ALS)—medically accepted, life sustaining, invasive procedures, provided at the direction of a physician or authorized registered nurse.

ambulance service—a qualified provider of medical transportation for patients requiring treatment and/or monitoring due to illness or injury.

ambulance service area (zone)—a designated geographic area contiguous to other such areas and delineated by the local EMS agency for the purpose of ensuring availability of emergency medical transport services at all times by one or more specified providers.

base hospital—one of a limited number of hospitals which, upon entering into written contractual agreement with the local EMS agency, is responsible for directing the advanced life support system or limited advanced life support system assigned to it.

basic life support (BLS)—medically accepted non-invasive procedures used to sustain life.

cardiopulmonary resuscitation (CPR)—opening and maintaining an airway, providing artificial ventilation by rescue breathing and providing artificial circulation by means of external cardiac compression.

casualty collection point (CCP)—a site for the congregation, triage (sorting), preliminary treatment, and evacuation of casualties following a disaster.

catchment area—the geographic area served by a specified health care facility or EMS agency.

centralized EMS dispatch center—a system which is responsible for establishing communications channels and identifying the necessary equipment and facilities to permit immediate management and control of an EMS patient. This operation must provide access and availability to public safety resources essential to the effective and efficient EMS management of the immediate EMS problem.

communications system—those resources and arrangements for notifying the EMS system of an emergency, for mobilizing and dispatching resources, for exchanging information, for remote monitoring of vital indicators, and for the radio transmission of treatment procedures and directions.

definitive care—a level of therapeutic intervention capable of providing comprehensive health care services for a specific condition.

designated facility—a hospital which has been designated by a local EMS agency to perform specified emergency medical services systems functions pursuant to guidelines established by the authority.

disaster—see medical disaster

dispatch triage—the process of sorting requests for emergency medical assistance based on information provided by the reporting party to that the appropriate resources can be sent.

emergency—a situation in which there is a real or perceived need for immediate action, attention or decision making to prevent mortality or to reduce serious morbidity (adjective form—emergent).

emergency air ambulance—an aircraft with emergency medical transport capabilities.

emergency ground ambulance—a surface transportation vehicle that is specialty designed, constructed, maintained, supplied, equipped, and intended for exclusive use in emergency transport of the sick and injured.

emergency ambulance service—an emergency medical transport provider operating within an organized EMS system for the purpose of assuring twenty-four (24) hour availability of such services. This pertains to all ground, air or water emergency medical transport.

emergency department—the area of a licensed general acute care facility that customarily receives patients in need of emergent medical evaluation and/or care.

emergency medical services (EMS)—the provision of services to patients requiring immediate assistance due to illness or injury, including access, response, rescue, prehospital and hospital treatment, and transportation.

EMS plan—a plan for the delivery of emergency medical services.

EMS system—a coordinated arrangement of resources (including personnel, equipment, and facilities) which are organized to respond to medical emergencies, regardless of the cause.

first responder—the first person (unit) dispatched to the scene of a medical emergency to provide patient care.

health facility—any facility, place or building which is organized, maintained and operated for the diagnosis, care and treatment of human illness or injury, physical or mental, including convalescence, rehabilitation and/or pre- and post-natal care, for one or more persons, to which patients are admitted for twenty-four (24) hours or longer.

hospital—an acute care hospital licensed under Chapter 2 (commencing with Section 1250) of Division 2, Health and Safety Code.

intervener physician—a physician on the scene of a medical emergency who offers to assist advanced life support personnel.

medical control—physician responsibility for the development, implementation, and evaluation of the clinical aspects of an EMS system.

medical disaster—a natural or human-caused event which overwhelms the medical resources within a system. It is characterized by a wide geographic scope and by damage to medical facilities and the transportation system. Because of its wide scope, it must be managed by a centralized, off-scene command system.

medical emergency—an unforeseen situation in which there is a real or perceived need for immediate medical care, based on an injury or other unforeseen acute physical or mental disorder.

medical protocol—pre-established physician authorized procedures or guidelines for medical care of a specified clinical situation, based on patient presentation.

metro—all census places with a population density of greater than 500 persons per square mile; or census tracts and enumeration districts without census tracts which have a population density of greater than 500 persons per square mile.

multi-casualty incident—a natural or human-caused event which may overwhelm the medical resources within a system. It is characterized by a limited geographic scope and can be managed by an on-scene command system.

mutual aid—the furnishing of resources, from one individual or agency to another individual or agency, including but not limited to facilities, personnel, equipment, and services, pursuant to an agreement with the individual or agency, for use within the jurisdiction of the individual or agency requesting assistance.

non-emergency—a situation in which there is no perceived need for immediate action, attention or decision making to prevent mortality or to reduce serious morbidity (adjective form—non-emergent).

pediatric emergency medical and critical care system—a subsystem within the EMS system designed to manage the treatment of the emergent pediatric patient.

prehospital emergency medical services—a sub-system of the emergency medical services system which provides medical services to patients requiring immediate assistance due to illness or injury, prior to the patient's arrival at an emergency medical facility.

prehospital time—the interval of time between activation of the emergency medical transport response to an emergency incident and arrival of the emergency patient at a receiving facility.

primary transport—transport of an emergency patient from the scene of an emergency incident to a receiving facility.

provider—an organization, institution, or individual authorized to provide direct patient care.

public safety agency—a functional division of a public agency which provides fire fighting, police, medical or other emergency services.

public safety answering point (PSAP)—the location at which an emergency telephone call is answered and, either appropriate resources are dispatched or the request is relayed to the responding agency.

public safety telephone operators—the initial answerer of an emergency call.

quality assurance/quality improvement—a method of evaluation of services provided, which includes defined standards, evaluation methodology(ies), and utilization of evaluation results for continued system improvement.

receiving facility—a general acute care facility which has been assigned a role in the EMS system by the local EMS agency.

response time—the total interval from receipt of a request for medical assistance to the primary public safety answering point (PSAP) to arrival of the responding unit at the scene. This includes all dispatch intervals and driving time.

rural—All census places with a population density of 7 to 50 persons per square mile; or census tracts or enumeration districts without census tracts which have a population density of 7 to 50 persons per square mile.

secondary care—health care beyond the primary. Included are more sophisticated diagnostic methods and

techniques, and laboratory facilities. This level of care is nearly available in medical care institutions serving a large population. (SOURCE: Tabors, 16th edition). Contrast with primary and tertiary care.

secondary transport—transport of an emergency patient from an initial receiving facility to a second treatment facility.

service area—the geographic area within which an EMS agency or health care facility provides service.

significant medical incident—a medical incident which is larger than normal. It includes both multicasualty incidents and medical disasters.

statewide EMS system—a network of local EMS systems, integrated and coordinated at the state level.

suburban—All census places with a population density of 51 to 100 persons per square mile; or census tracts or enumeration districts without census tracts which have a population density of 51 to 100 persons per square mile.

transfer agreement—a written agreement between health facilities providing reasonable assurance that transfer of patients will be effected between health facilities whenever such transfer is medically appropriate, as determined by the attending physician.

transport time—the interval of time required for emergency medical transport of an ill or injured person from the scene of an emergency incident to arrival at a receiving facility.

trauma care system—a subsystem within the EMS system designed to manage the treatment of the trauma patient.

triage—the process of sorting the sick and injured on the basis of type and urgency of condition present, so that they may be properly routed to the medical facility most appropriately situated and equipped for their care.

urban—all census places with a population density of 101 to 500 persons per square mile; or census tracts and enumeration districts without census tracts which have a population density of 101 to 500 persons or more per square mile.

urgent—a situation in which there is a real or perceived need for immediate action, attention, or decision making to reduce morbidity, but where no life threatening situation appears to exist.

wilderness—census tracts or enumeration districts without census tracts which have a population of less than seven persons per square mile.